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09/754,554	01/04/2001	Andrew S. Idsinga	INTL-0524-US (P10883)	3694

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EXAMINER

BARNES, CRYSTAL J

ART UNIT PAPER NUMBER

2121

DATE MAILED: 09/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/754,554

Applicant(s)

IDSINGA, ANDREW S.

Examiner

Crystal J. Barnes

Art Unit

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-7 and 9-15 is/are rejected.
- 7) ☒ Claim(s) 2 and 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. The following is a Final Office Action in response to Amendment received on 09 August 2004. Claims 4 and 10 have been cancelled. Claims 1, 5, 7, 11 and 13 have been amended. Claims 1-15 remain pending in this application.

#### ***Drawings***

2. The replacement drawings were received on 09 August 2004. These replacement drawings are approved.

#### ***Response to Arguments***

3. Applicant's arguments, see Remarks pages 6-7, filed 09 August 2004, with respect to the rejection of claims 4, 5, 10 and 11 under 35 USC 102(e) as being anticipated by USPN 6,101,528 to Butt have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of USPN 6,512,768 B1 to Thomas.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claim 7 recites the limitation "automatically send a discovery message to a node in response to a request to access the node". This limitation is contradictory. Sending in response to a request is not automatically sent.

***Claim Rejections - 35 USC § 102***

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 1, 3, 5-7, 9, 11-15 are rejected under 35 U.S.C. 102(e) as being anticipated by USPN 6,512,768 B1 to Thomas.

As per claim 1, the Thomas reference discloses a method comprising:  
automatically sending (see column 7 lines 55-57, "periodically multicast") a

discovery message ("Hello PIE") to a node (see column 7 lines 53-55, "tag-switching routers"); and enabling node access (see column 8 lines 39-43, "link adjacency") if a response to the discovery message ("Hello PIE") is received (see column 8 lines 25-26, "receipt of Hello PIE"); and automatically checking a link (see column 2 lines 17-21, "verify ongoing operation of link") to the node ("TRS1") to make sure that the node ("TRS1") is still accessible (see column 8 lines 45-46, "hello hold timer").

As per claim 3, the Thomas reference discloses notifying a client (see column 7 lines 25-28, "interface modules 62, 64, 66") wishing to access a node (see column 8 lines 39-43, "TSR1") when a state transition ("link adjacency") is made based on a response to a discovery message being received ("receipt of Hello PIE").

As per claim 5, the Thomas reference discloses including automatically checking said node ("TSR1, TSRM") at timed intervals (see column 9 lines 28-30, "periodically transmits Keep Alive PIE") in order to maintain a connected state (see column 8 lines 45-46, "link adjacency").

As per claim 6, the Thomas reference discloses further including automatically sending a message (see column 8 lines 47-49, "subsequent Hello PIE") to determine whether the node ("TRS1") is still accessible after said response to said discovery message is received ("receipt of Hello PIE").

As per claim 7, the Thomas reference discloses an article comprising a medium (see column 7 lines 31-38, "persistent storage device") storing instructions ("instructions") that enable a processor-based system (see column 7 lines 29-31, 36-38, "high-performance processor") to: automatically send (see column 7 lines 55-57, "periodically multicast") a discovery message ("Hello PIE") to a node (see column 7 lines 53-55, "tag-switching routers") in response to a request to access the node; enable node access (see column 8 lines 39-43, "link adjacency") if a response to the discovery message ("Hello PIE") is received (see column 8 lines 25-26, "receipt of Hello PIE"); and automatically check a link (see column 2 lines 17-21, "verify ongoing operation of link") to the node ("TRS1") to make sure that the node ("TRS1") is still accessible (see column 8 lines 45-46, "hello hold timer").

As per claim 9, the rejection of claim 3 is incorporated and further claim 9 contains limitations recited in claim 3; therefore claim 9 is rejected under the same rationale as claim 3.

As per claim 11, the rejection of claim 5 is incorporated and further claim 11 contains limitations recited in claim 5; therefore claim 11 is rejected under the same rationale as claim 5.

As per claim 12, the rejection of claim 6 is incorporated and further claim 12 contains limitations recited in claim 6; therefore claim 12 is rejected under the same rationale as claim 6.

As per claim 13, the Thomas reference discloses a system comprising: a network interface (see column 7 lines 38-41, "I/F modules 62, 64, 66, forwarding engine 70"); and a storage (see column 7 lines 36-38, "memory circuitry 71, 73, 75, 75") coupled to said network interface ("I/F modules 62, 64, 66, forwarding engine 70"), said storage ("memory circuitry 71, 73, 75, 75") storing instructions (see column 7 lines 31-36, "instructions") that enable said system (see column 7 lines 25-28, "tag-switching router 100") to automatically send (see column 7 lines 55-57, "periodically multicast") a discovery message ("Hello PIE") to a node (see column 7 lines 53-55, "tag-switching routers") over said interface ("I/F modules 62, 64, 66, forwarding engine 70") to access the node ("tag-switching routers") and to enable node access (see column 8 lines 39-43, "link adjacency") if a response to the discovery message is received (see column 8 lines 25-26, "receipt of Hello PIE"), said storage ("memory circuitry 71, 73, 75, 75") further storing instructions ("instructions") that enable said system ("tag-switching router 100") to automatically check (see column 2 lines 17-21, "verify ongoing operation of link")

said node ("TSR1, TSRM") at timed intervals (see column 9 lines 28-30, "periodically transmits Keep Alive PIE") in order to maintain a connected state (see column 8 lines 45-46, "link adjacency").

As per claim 14, the Thomas reference discloses said system is a processor-based system (see column 7 lines 29-31, 36-38, "high-performance processor").

As per claim 15, the Thomas reference discloses said storage ("memory circuitry 71, 73, 75, 75") stores instructions ("instructions") to cause said system ("tag-switching router 100") to automatically send a message (see column 8 lines 47-49, "subsequent Hello PIE") to determine whether the node ("TRS1") is still accessible after said response to said discovery message is received ("receipt of Hello PIE").

***Allowable Subject Matter***

9. Claims 2 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.



*Conclusion*

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following references are cited to further show the state of the art with respect to dynamically discovering network topology in general:

USPN 5,796,736 to Suzuki

USPN 6,182,136 B1 to Ramanathan et al.

USPN 6,253,337 B1 to Maloney et al.

USPN 6,327,252 B1 to Sifton et al.

USPN 6,549,932 B1 to McNally et al.

USPN 6,760,306 B1 to Pan et al.

USPN 6,795,409 B1 to Gundavelli

US Pub. No. 2002/0075834 A1 to Shah et al.

US Pub. No. 2002/0075870 A1 to de Azevedo et al.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.**

See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Crystal J. Barnes whose telephone number is 703.306.5448 or 571.272.3679 after 14 October 2004. The examiner can normally be reached on Monday-Friday alternate Mondays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on 703.308.3179 or

571.272.3687 after 14 October 2004. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CJB  
24 September 2004

  
Anthony Knight  
Supervisory Patent Examiner  
Group 3600